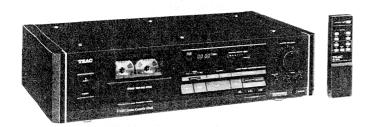
# TEAC



# SERVICE MANUAL

# V-580/V-580

STEREO CASSETTE DECK

Effective: October 1989 930559

5704045700

## SPECIFICATIONS

件機

(C x H x W) anoisnamiO (Isbom silansuA).X.U\aqonu3) W TI (lebom sbens3\.A.2.U Power Consumption 15 W (General Export/ (Japom 240 V AC, 50 Hz (U.K./Australia 220 V AC, 50 Hz (Europe model) (labom 120 V AC, 60 Hz (U.S.A./Canada 50/60 Hz (General Export model) Power Requirements 120/220/240 V AC, Headphones: 8 ohms of 50k ohms or more Outputs Line: 0.43 V for load impedance Line Input 87 mV, 50k ohms 08-0 not shnoses **78** YlətemixorqqA əmiT gaibniW tzs7

Accessories Input-output cord Weight 4.0 kg (8.82 lbs) net  $(..91/91. \times 4-13/19.. \times 10-12/19..)$ mm 2.275 x 221 x 284

• Improvements may result in specificametal tape except as noted. • Specifications were determined using

tion or feature changing without notice.

zH 000,71 - 22) zH 000,81 - 02 ±3 4B), CrO<sub>2</sub> zH 000'61 - SZ) zH 000'0Z - 0Z ±3 dB), Metal 20 - 21,000 Hz (25 - 20,000 Hz 089-A -Frequency Response (Overall, -20 dB) Wow and Flutter 0.045 % (WRMS) 10fc reel motor Motors 2:1 DC servo capstan motor (sqi 8\f-f) pes\mp 8\f.\tau besq2 aqsT (Philips type) Type of Tape Cassette tape C-50 and C-90 рэск - V-580 2:1 Erase, 1 Record/Play-Playback (combination) Heads - V-680 3:1 Erase, 1 Record and 1 Track System 4-Track, 2-Channel Stereo

70 dB (Dolby B NR In, over 5 kHz) (bethgisW, level GHT % E) 8b 0a (IleravO) oiteA asioN-ot-lengi2 ±3 dB), Normal ZH 000'91 - 0E) ZH 000'LI - 9Z ±3 qB)' CLO<sup>5</sup>

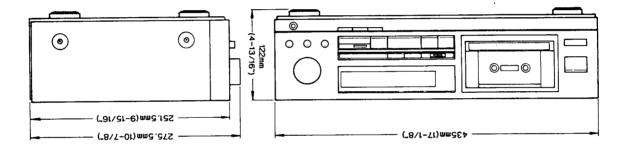
zH 000,71 - 05) zH 000,81 - 82

zH 000'6l - 0E) zH 000'0Z - 9Z

±3 dB), Metal

085-V -±3 dB), Normal

80 qB (Dolph C NB In, over 1 kHz)



。もまいもがようでも更変くな苦子 、めぶの善がお新井 . I

2. 本マニュア JVの 0 dB は0.775 V を基準としています。

、いち式>ブリ用動を品語の宝 計でいてトモ市公司組合す外交、中丁品語要重全安却申△

、下丁素商輯登の治究研ーコパイ , お口 ひ炎ーコパイ 。でまいて小ち武撃ち亡基コ齢齢実のさべ荷 菜番ーコパイ , 却ムモスぐく E ぐんや リスト ( ーコパイ・

> Specified. Value of "dB" in the data refers to 0 dB (0.775 V), except where Improvements may result in SPECIFICATIONS changes.

#### CAUTION

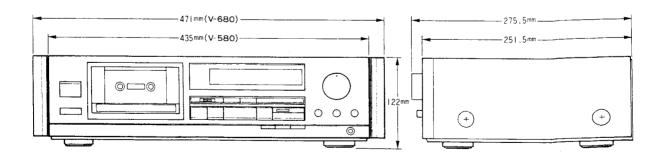
refer to the appropriate parts list and ensure exact replace-They must always be replaced with identical components - $\Delta$  Parts marked with this sign are safety critical components.

Laboratories Licensing Corporation. "Dolby" and the double-D symbol are trademarks of Dolby from Dolby Laboratories Licensing Corporation. Dolpy Noise Reduction System manufactured under license

トラック形式	4 トラック 2 チャンネル・ステレオホニック方式		
ヘッド構成	< V-68O> 消去ヘッド×1, 録音×1・再生×1 コンビネーション・ヘッド < V-58O> 消去ヘッド×1, 録音/再生×1(2ヘッド)		
使 用 テ ー プ	C-60, C-90タイプ カセット・テープ		
テープ速度	4.8センチ		
モ ー タ ー	キャブスタン:DC サーボモーター×1 リ ー ル:DC モーター×1		
ワウ・フラッター	0.045% (W.RMS), 0.07% (W.Peak EIAJ)		
周 波 数 特 性 (総 合)	〈V-68O〉 20Hz~21,000Hz(25Hz~20,000Hz±3dB、EIAJ): メタル 20Hz~20,000Hz(25Hz~19,000Hz±3dB、EIAJ): クローム 20Hz~18,000Hz(25Hz~17,000Hz±3dB、EIAJ): ノーマル 〈V-58O〉 25Hz~20,000Hz(30Hz~19,000Hz±3dB、EIAJ): メタル 25Hz~18,000Hz(30Hz~17,000Hz±3dB、EIAJ): クローム 25Hz~17,000Hz(30Hz~16,000Hz±3dB、EIAJ): ノーマル		
総合SN比	60dB(NR OUT、3% THDレベル、WTD) 70dB(ドルビーB NR IN 5kHz以上) 80dB(ドルビーC NR IN 1kHz以上)		
早巻時間	C-60テープで約85秒		
入 カ	ラ イ ン:87mV(入力インビーダンス50kΩ以上)		
出 カ	ラ イ ン:0.43V(負荷インピーダンス50kΩ以上) ヘッドホン:2mW/8Ω		
電源	100V AC, 50/60Hz		
消費電力	15W		
外 形 寸 法	〈V-68O〉471(幅)×122(高さ)×275.5(奥行)mm 〈V-58O〉435(幅)×122(高さ)×275.5(奥行)mm		
重量	<v-680>5.8kg <v-580>4.0kg</v-580></v-680>		
付 属 品	入出力コード×2本, リモコンユニット(RC-348)×1, 乾電池(単3)×2		

※この仕様は特に表示した項目を除き、当社基準テープを使用して測定したものです。

<sup>※</sup>仕様および外観は、改善のため予告なく変更することがあります。

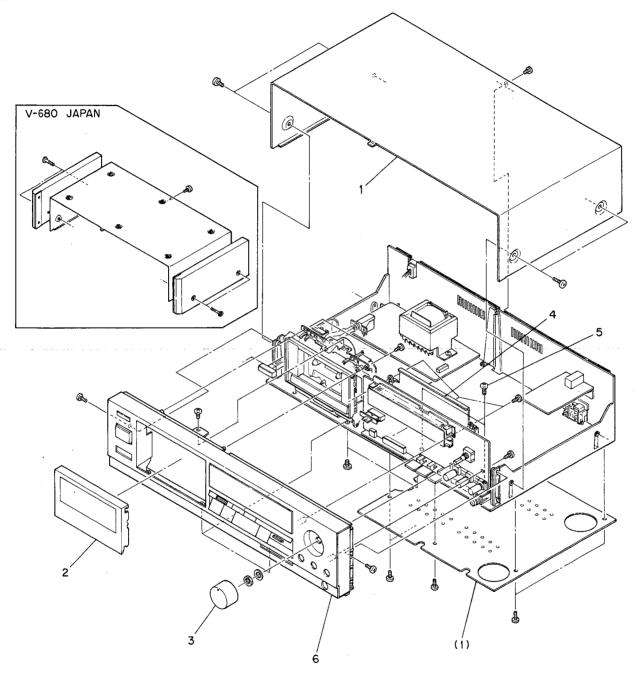


# **2 REMOVAL OF EXTERNAL COMPONENTS**

外装部品の外し方

#### Disassemble in number-order

番号順に外して下さい



# **3 PARTS LOCATION**

部品配置図

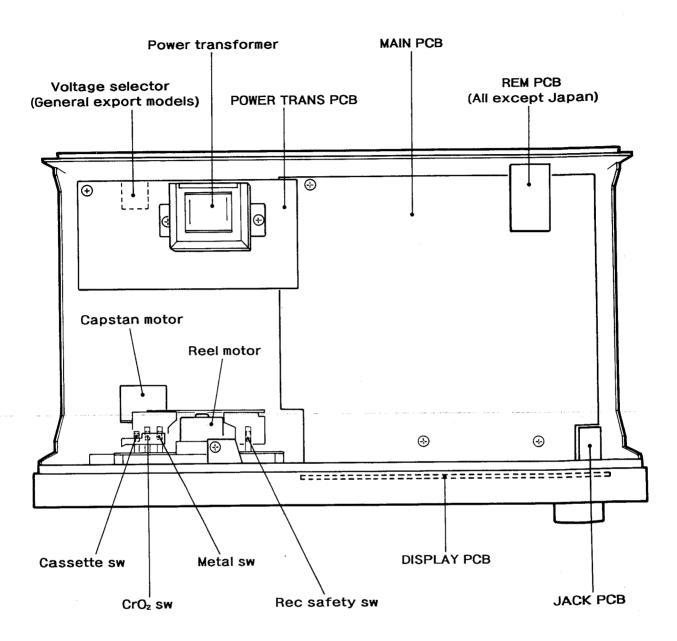


Fig. 3-1 Top view 上面図

## 4 MECHANICAL ADJUSTMENTS AND CHECKS

#### 機構部の調整と確認

#### 4-1 TAPE SPEED

- 1) Connect a frequency couter to the deck as shown in
- Simply press POWER switch to ON to rotate the motor, then continue the motor rotation for approx. 1 minute for warm-up.
- 3) As soon as the warm-up finishes, load a TEAC MTT-111 test tape with a 3,000 Hz test tone and play the beginning of the test tape.
- 4) Adjust the variable resistor (Fig. 4-2) to get the adjustment value of 3,000 Hz to 3010 Hz.
- 5) In play mode, check that the following figures are obtained at the beinning and at the end of the tepe.

Speed devaiation:

3,000 Hz ± 75 Hz

Speed drifting:

within 75 Hz

- 4-1 テープ・スピード
- 1) 図4-1 のように周波数カウンタを接続する.
- 2) 電源を入れ、約 1分間ウォーミング・アップする.
- 3) テストテープ MTT-111(3kHz) を巻始めの条件で再生する.
- 4) 周波数値が 3,000~3,010 Hz となるよう, Fig. 4-2 に示す調整 VR を調整する.
- 5) 巻始めから巻終りまで再生し、速度偏差および変動幅を確 設する。

速度偏差:

3.000 Hz  $\pm 75$  Hz

変動幅:

75 Hz 以内

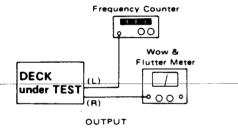


Fig. 4-1

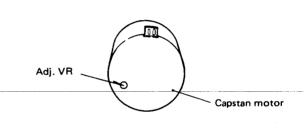


Fig. 4-2

# 4-2 WOW AND FLUTTER (PLAYBACK METHOD)

Note: These measurements should be made at the beginning, middle, and the end of the tape.

- Connect a wow-and-flutter meter to the deck as shown in Fig. 4-1.
- 2) Load and play a TEAC MTT-111 test tape.
- 3) Check that the readings on the wow-and-flutter meter are as follws.

Specifications:

0.12 % WRHS

4-2 ワウ・フラッタ

(再生法)

注: テープの巻始め、中間、巻終りで測定する.

- 1) 図4-1 のようにワウ・フラッタ・メータを接続する.
- 2) テスト・テープ HTT-111 を再生する.
- 3) ワウ・フラッタ値が下の規格内に入ることを確認する.

規格: 0.12 % WRMS

#### 4-3 REEL TORQUE

1) Load the cassette torque meter on the deck and read the pointer indication on the dial scale for each tape transport operation. The measured torque should be within the follwing specified values.

Specifications:

Take-up :

30 ∼70 g⋅cm

(0.417~ 0.972 oz-inch)

Supply:

2.5 ~ 6 g · cm

(0.035~ 0.083 oz-inch)

F.F./REW: 80  $\sim$  180 g  $\cdot$  cm

(1.111~ 2.500 oz-inch)

#### 4-4 VOLTAGE CONVERSION

(General Export Hodels only)

- 1) ALWAYS DISCONNECT THE POWER LINE CORD BEFORE MAKING THESE ADJUSTMENTS !
- 2) Locate the viotage selector on the rear panel.
- 3) Using a regular screwdriver, turn the selector until the numerals corrsponding to the voltage requirements of your area appear.

#### 4-3 リール・トルク

1) カセット型トルク・メータによる測定値が下表の範囲内で あることを確認する.

テイクアップ・トルク:

30 ~70 g ⋅ cm

バックテンション・トルク: 2.5 ~ 6 g・CM

早送り/巻戻しトルク: 80 ~ 180 g・cm

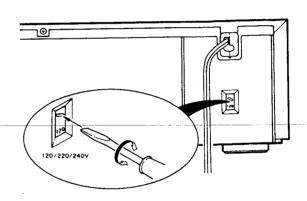


Fig. 4-3

### 5 ELECTRICAL CHECKS AND ADJUSTMENTS

#### アンプ部の確認と調整

#### 5-1 PRECAUTIONS

- Before performing adjustments and checks clean and demagnentize the entire tape path.
- Make sure the deck is prorerly set for the voltage in your locality.
- In general, adjustments and checks are made in the order of L-ch then R-ch. Double REF. Nos. indicate L-ch/R-ch. (Example: R51/R61)
- 4) 0 dB is referenced to 0.775 V. If an AC voltmeter that references 0 dB to 1 V is used, appropriate compensation should be made.
- 5) The AC voltmeter used in the procedures must have an input impedance of 1 H-ohmes or more.
- 6) Note the "Deck settings" at the top of each chart.

  The settings apply to all check for a specific chart unless explicitly stated otherwise.
- Sinse this deck has an automatic tape selector, be sure to use test tapes that have tape position detecting holes.
- Input terminals and measuring points at each step are the same as previous step, otherwise specified.

#### 5-1 注意

- 1) アンプ部の調整・確認の前に、テープ走行系の消磁と清掃を行なってください。
- 2) 特に指定の無い限り、調整は L ch, R ch の順序で行なってください。
  - 尚 R51/R61 のように記されている回路番号は Lch/Rchを示します.
- 3) 0 dB= 0.775V
- 4) 測定に使用するレベル計の入力インピーダンスは 1 MΩ以上のものを使用してください。
- 5) 本機はテープ・セレクタ自動検出機構になっていますので テスト・テープは必ずテープ・ポジション検出孔のあるも のを使用してください。
- 6) 入力端子及び測定個所は各ステップに於いて特に明示されている場合を除き、直前のステップと同じです。

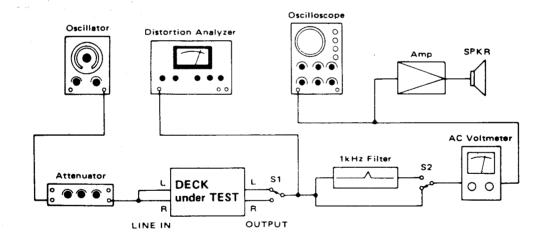


Fig. 5-1 Basic test setup 基本測定接続図

#### 5-2. ADJUSTMENT LOCATIONS 調整個所 (V-680)

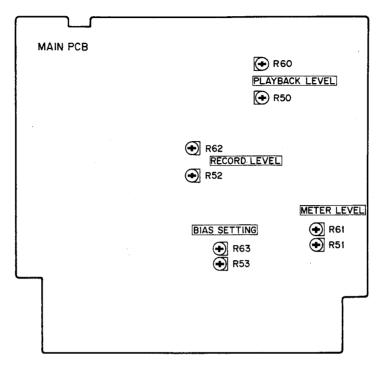


Fig. 5-2 Adjustment points 調整個所 (V-680)

#### 5-3. ADJUSTMENT LOCATIONS 調整個所 (V-580)

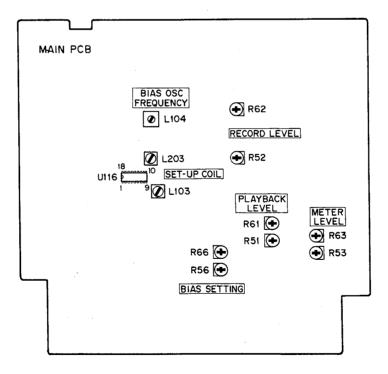


Fig. 5-3 Adjustment points 調整個所 (V-580)

#### 5-4. PLAYBACK PERFORMANCE 再生系

Deck settings

Mode AOTO MONITOR SW. (V-680)

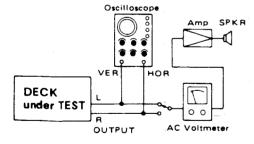
PLAY TAPE OUT

TEAC test tapes:

: For Dolby level calibration HTT-150

For playback frequency response check for NORMAL HTT-256 : For playback frequency response check for METAL and CrO2 HTT-356

DOLBY	MUNITUR SW. (V-680): TAPE NR SW. : OUT ILTER SW. (V-680): OUT	MTT-356 MTT-5511		uency response check for HET/ NORMAL	
ITEM 調整項目	SETTING 設定	INPUT SIGNAL 入力信号	ADJUST (or CHECK) 調整個所	MEASURING POINT, RESULT 測定個所·調整値	REMARKS 備 考
1. REC ・PLAY head azimuth 録・再ヘッド	Connection : Fig. 5-4	MTT-256 or HTT-356 ( 10 kHz )	Azimuth screws of R・P head 録・再ヘッドの アジマス調整ネジ V-680 Fig.5-5 V-580 Fig.5-6	OUTPUT (L/R): Maximumx output at L & R-ch's. L-R 各 ch 共 最大出力	
アジマス		HTT-150	Check	OUTPUT (L/R): Phase: within 45° 位相: 45°以内	Fig. 5-7
2. Playback output level 再生出力レベル	Same as above 同上	MTT-150	V-680 R50/R60 V-580 R51/R61	OUTPUT (L/R) : -5 dB ( 436 mV )	
3. Meter level setting メータ・レベルセット	Same as above 同上	MTT-150	V-680 R51/R61 V-580 R53/R63	PEAK LEVEL meter (L/R) : O dB (RED) lit O dB (赤 )点灯	
4. Playback frequency response 再生周波数特性	Same as above 同上	MTT-256 (MTT-356)	Check	OUTPUT (L/R) : Standerd 規格:Fig.5-8	
5. Playback S/N ratio	Same as above 同上	MTT-5511 (fully demagnetized using bulk tape eraser)	Check	OUTPUT (L/R): S/N 45 dB min. (120 \( \mu \)) 46 dB min. (70 \( \mu \))	
再生 S/N 比		(バルク・イレーサで 充分消磁されたもの)		-5 dB (436 mV) is referenc 基準レベルは -5 dB (436 mV	



Azimuth screw 位相調整ネジ **①** 

Azimuth screw 位相調整ネジ **D** <u>(+)</u>

Fig. 5-5 V-680

Fig. 5-6 V-580

Fig. 5-4 Test setup for azimuth check 位相測定接続図

 $0^{\circ}$  (in phase) (同位相)

90°

135° 180° (out of phase) (逆位相)

Fig. 5-7 Confirming phase relationship 位相

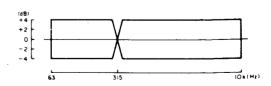


Fig. 5-8 Playback frequency response 再生周波数特性

#### 5-5. MONITOR PERFORMANCE モニター系

Deck settings

Mode
MASTER REC LEVEL cont.
PRESET cont 1/R

RECORD/PAUSE Maximun REF position

PRESET cont. L/R AUTO MONITOR SW. (V-680) DOLBY NR SW.

SOURCE OUT OUT

DOLBY NR SW. MPX FILTER SW. (V-680)

	ITEM 調整項目	SETTING 設 定	INPUT SIGNAL 入力信号	ADJUST (or CHECK) 調整個所	MEASURING POINT, RESULT 測定個所・調整値	REMARKS 備 考
6.	Hin. LINE input level ライン 最小入力レベル	Connection : Fig. 5-1	LINE IN (L/R) : 400 Hz / -19 dB (86.9 mV)	Check	OUTPUT (L/R) : -5 dB ±3 dB (308 mV ∼ 615 mV)	
7.	7. Specified LIME input level LIME 規定入力 レベル	Otion . Fig. F. 4	LINE IN (L/R) : 400Hz/-9dB(275mV)	PRESET cont. ( L / R )	OUTPUT (L/R) : -5 dB (436 mV)	
		Connection : Fig.5-1		o not move the PRESE まみを動かさないこと	T cont. (L/R).(Specific posi	tion)
8.	Heter level メータ・レベル	Connection : Fig.5-1	LINE IN (L/R) : 400Hz/-9dB(275mV)	Check	REAK LEVEL meter (L/R) : 0 dB (RED)	
9.	PHONES output level PHONES 出力レベレ	Connection : Fig. 5-9 PHONES LEVEL cont. : Max.	LINE IN (L/R) : 400Hz/-9dB(275mV)	Check	PHONES: At each channel 各チャンネルで -15 dB ±3 dB (97.5 mV~ 195 mV)	8Ω load

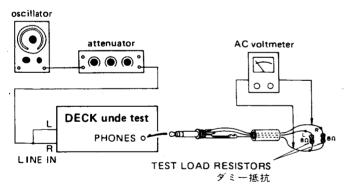


Fig. 5-9 Test setup for PHONES check ホーン出力測定接続図

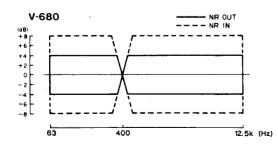


Fig. 5-11 Overall frequency response 録再周波数特性

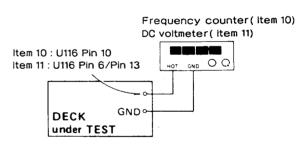


Fig. 5-10 Test setup for bias osc. frequency adjustment バイアス発振周波数調整用接続図

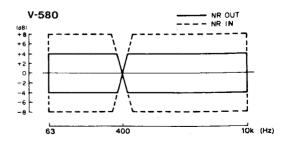


Fig. 5-12 Overall frequency response 録再周波数特性

#### 5-6. RECORDING PERFORMANCE 録音系

Deck settings

Mode

: Rec/Play ( Item 10,11 ) : Record then Playback ( Item 12~22 )

: Maximum

Specified position( 規定位置 )

MASTER REC LEVEL cont. : Maxim
PRESET (L/R) cont. : Speci
AUTO MONITOR SW. (V-680) : TAPE

OUT : OUT

DOLBY NR SW.
MPX FILTER SW. (V-680) BIAS FINE cont.

: REF ( center ) position

TEAC recording test tapes HTT-5571 : For METAL HTT-5561 : For CrO<sub>2</sub> HTT-5511 : For NORMAL

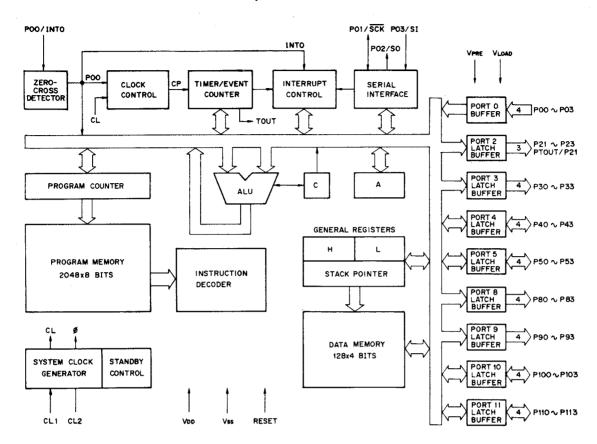
	DINO 1	INE CONT. : REF ( Cer	itter ) posttion		
	ITEM 調整項目	SETTING 設 定	INPUT SIGNAL 入力信号	ADJUST (or CHECK) <b>润整個</b> 所	MEASURING POINT, RESULT 測定個所·調整值  REMARKS 備 考
10.	Bias osc frequency バイアス 発振周波数 (V-580 only)	Connection : Fig.5-10 Tape : MTT-5571 Mode : REC / PLAY	No signal	L104	U116 pin10 : 100 kHz ±2 kHz
11.	Step-up coil			L103/L203	U116 pin 6 / pin 13 : * Hinimum DC voltage DC 電圧最小値
	ステップ・アップ コイル (V-580 only)	Same as above 同上	No signal	set to the max	ng of the voltmeter is negative (-), imum negative voltage. ス電圧を指示する場合はマイナス電圧の する.
12.	Record bias バイアス・セット	Connection : Fig. 5-1 TAPE : HTT-5571 BIAS FINE cont.: REF position	LINE IN (L/R): 400 Hz and 10 kHz alternately / 交互信号 / -42 dB (6.15 mV)	V-680 R53/R63 V-580 R56/R66	OUTPUT (L/R) Equal output level (record and playback) between 400 Hz and 10kHz 400 Hz と10 kHz の録再出力が等し くなること.
13.	13. BIAS FINE	Same as above	LINE IN (L/R) : 10 kHz / -42 dB (6.15 mV)	BIAS FINE cont. Min.←→Max.	OUTPUT (L/R): Check Recorded signal level variation 録音された信号のレベル変化 5 dB minimum (V-680) 3 dB minimum (V-580)
		After checking, set the BIAS F チェック後 BIAS FINE つまみを	INE cont. to REF ( cen REF ( センター ) 位	ter ) position. 置に戻しておくこと	
44	December 1949	Connection : Fig. 5-1 TAPE : HTT-5511	LINE IN (L/R) :	R52 / R62	Output (L/R): Output level (record and playbak) 録再出力 -8 dB ( 300 mV )
14.	Record level 録音レベル	Connection: Fig. 5-1 TAPE: MTT-5571, MTT-5561 DOLBY NR sw.: IN / OUT, B / C	400 Hz / -12 dB (195 mV)	Check	Output (L/R): Output level (record and playback 録再出力 -10 dB~ -6 dB (245 mV~388 mV)
15.	Total harmonic distortion 総合歪率	Connection: Fig.5-1 TAPE: MTT-5571 TAPE: MTT-5561 TAPE: MTT-5511	LINE IN (L/R) : 400 Hz / -12 dB (195 mV)	Check	OUTPUT (L/R): 2.5 % or less 2.5 % 以下
16.	Overall frequency response 经再周波数特性	Connection : Fig.5-1 TAPE : HTT-5571 TAPE : HTT-5561 TAPE : HTT-5511	LINE IN (L/R) : 40 Hz ~12.5 kHz/ -42 dB (6.15 mV)	Check	OUTPUT (L/R) : Standard Fig.5-11 (V-680) Standard Fig.5-12 (V-580)

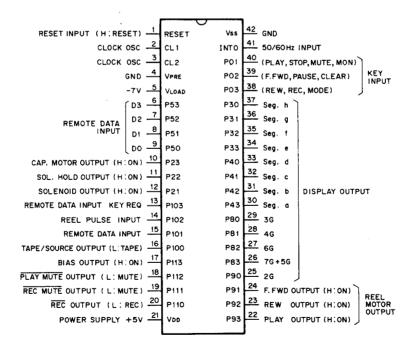
	ITEM 調整項目	SETTING 設 定	INPUT SIGNAL 入力信号	ADJUST (or CHECK) 調整個所	MEASURING POINT, RESULT 測定個所·調整值 REMARKS 備 考
17.	17. Overall S/N ratio 総合S/N 比	Tape: MIT-5571	No signal 無信号	Check	OUTPUT (L/R) : METALL 45 dB min. CrO2 45 dB min. NORMAL 44 dB min. 400 Hz / -8 dB (300 mV) is the
	発振周波数 (V-580 only)	Tape : HTT-5511			reference level. 基準レベルは 400 Hz / -8 dB (300 mV)
18.	Erase efficiency	Connection : Fig.5-1 but engage 1-kHz filter 1-kHz フィルター使用 Tape : MTT-5571	LINE IN ( L/R ) 1 kHz / +1 dB ( 0.869 V )	Check	OUTPUT (L/R) : 65 dB min. ratio
	消去効果	Record a 1 kHz signal. Erase t between the 1 kHz portion and 録音部分を再生したときのレベル	the erased portion.		and play to find the difference の出力レベルとの差を <b>測</b> 定.
19.	REC MUTE	Same as above 同上	Same as above 同上	Check	OUTPUT (L/R) : 65 dB min. ratio ( V-680 ) 63 dB min. ratio ( V-580 )
	function REC MUTE 効果	Record a 1 kHz signal. Push RI portion and the "rec mute" por 1 kHz 信号を録音し,途中で REC このテープを再生し,1 kHz 部分	rtion. C MUTE 釦を押して無信号	録音部分を作る	o find the difference between the 1-kHz
20.	20. Channel	Same as above 同 上	LINE IN: L ch 1-kHz/-9dB (275mV) R ch No signal 無信号	Check	OUTPUT ( R ) : 30 dB min. ratio
	separation チャネル・ セパレーション	Set the deck to record mode. (L-ch) and "no signal" port 録音後,再生して 1-kHz 録音音	ion ( R-ch ).		etween the 1-kHz recorded portion D出力レベル差を測定.
		Change the above connection a L-ch と R-ch を入れ替えた場合			
21.	21. Adjucent track crosstalk トラック間 クロストーク	Connection: Fig. 5-1 but not connect LINE (L) and output (L) L ch の入出力の接続不要	LINE IN: L ch No signal 無信号 R ch 125Hz/-9dB (275mV)	Check	OUTPUT ( R ) : 40 dB min. ratio
		Record a 125 Hz signal on R-c Check leakage level against t R-ch トラックに 125 Hz 信号を 次にテープを反転し、再生したと	he output reference of を録音し、その再生出力を	previously record 基準レベルとする.	ed portion.

#### **6 IC BLOCK DIAGRAMS**

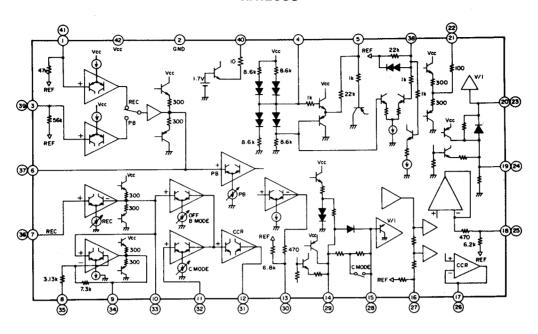
ICブロック・ダイヤグラム

#### μPD7537ACU

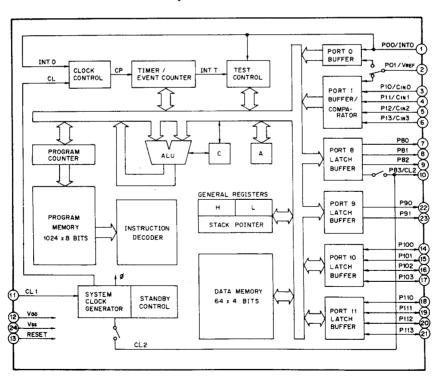




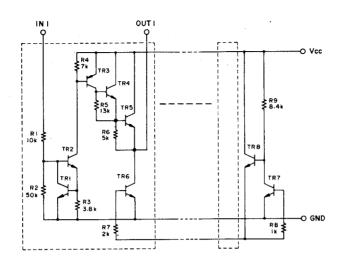
#### HA12088

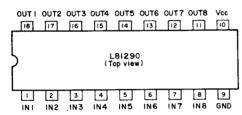


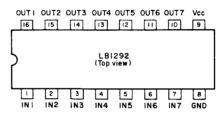
#### μPD7566CS



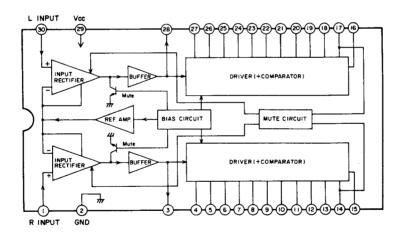
#### LB1290, LB1292



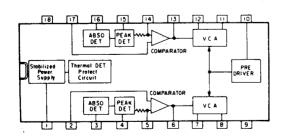




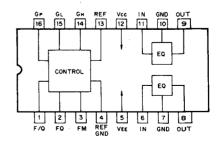
#### HA12067NT



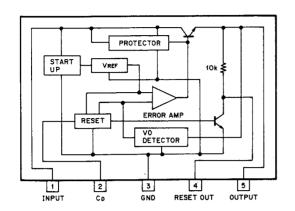
#### μPC1297CA



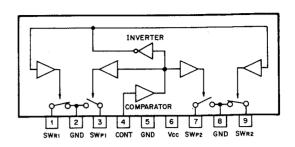
#### **CXA1198AP**



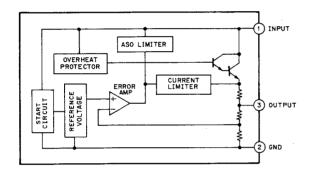
L78LR05



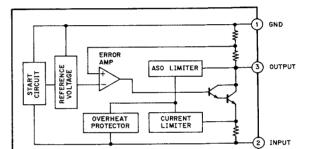
μРС1330НА



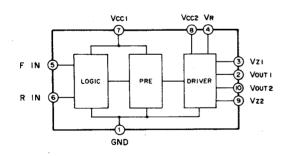
M5F78M15L VOLTAGE REGULATOR (+15V)



M5F79M15L VOLTAGE REGULATOR (-15V)



BA6109

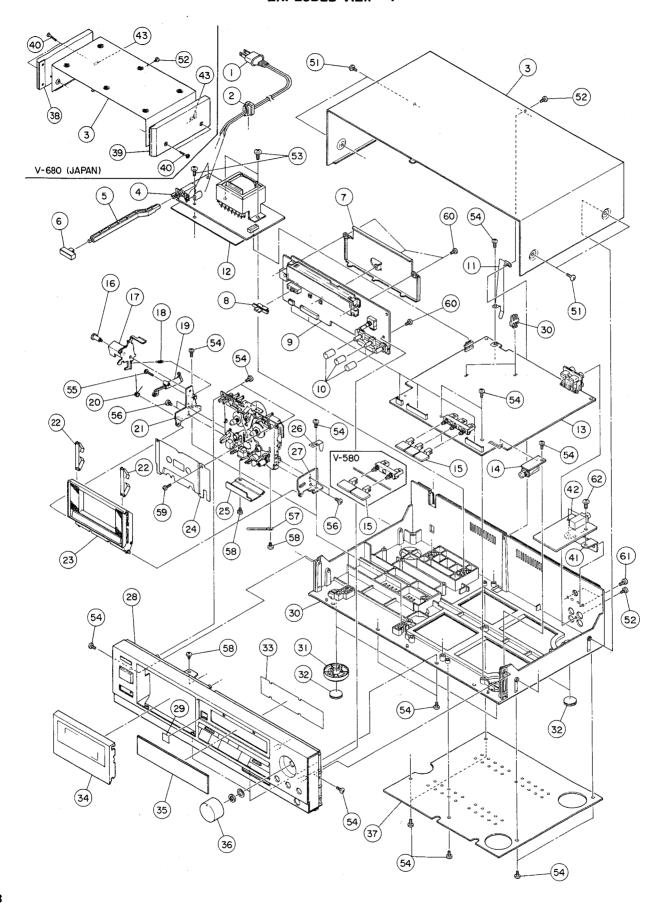


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FIN	RIN	Vout 1	Vout 2		į, j
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н	L	н	L	]	TANANA KARA
L	L	OPEN	OPEN	]	1 10

## 7 EXPLODED VIEWS AND PARTS LIST

分解図とパーツ・リスト

**EXPLODED VIEW - 1** 



#### EXPLODED VIEW-I

REF. NO. PARTS NO.	DESCRIPTION	REMARKS
I- I	BONNET [ALL EXCEPT J] BONNET ASSY [J] (V-680) POWER TRANS PCB ASSY [J] POWER TRANS PCB ASSY [US,C] POWER TRANS PCB ASSY [GE] POWER TRANS PCB ASSY [E] POWER TRANS PCB ASSY [UK]	Ref. pages 23 & 26 Ref. pages 23 & 26
1-6   5800752300   1-7   *5801126500   1-8   5801127000   1-9   *5200287900   *5200287500   *5200287510   1-10   5801125700	BRACKET, PCB KNOB, SLIDE SWITCH DISPLAY PCB ASSY [J] (V-680) DISPLAY PCB ASSY [ALL EXCEPT J] (V-680) DISPLAY PCB ASSY [J] (V-580) DISPLAY PCB ASSY [ALL EXCEPT J] (V-580)	Ref. pages 21 & 26 Ref. pages 21 & 26 Ref. pages 22 & 26 Ref. pages 22 & 26
1-11	SHEET, TRANSFORMER [US] MAIN PCB ASSY [J] (V-680) MAIN PCB ASSY [ALL EXCEPT J] (V-680) MAIN PCB ASSY [J] (V-580) MAIN PCB ASSY [ALL EXCEPT J] (V-580) JACK PCB ASSY (V-680) JACK PCB ASSY (V-580)	Ref. pages 21 & 24 Ref. pages 21 & 24 Ref. pages 22 & 25 Ref. pages 22 & 25 Ref. pages 21 & 24 Ref. pages 21 & 24 Ref. pages 22 & 25
-16	ARM, EJECT SPRING, ARM DAMPER F077-016	
1-21 *5801126400 1-22 *5800603801 1-23 *5801148800 1-24 *5801142000 1-25 *5801124500	SPRING, CASSETTE PRESSURE HOLDER, CASSETTE PLATE (L)	
1-26	BRACKET, MECHANISM FRONT PANEL ASSY [J] (V-680) FRONT PANEL ASSY (UR) [ALL EXCEPT J] (V-680) FRONT PANEL ASSY [J] (V-580) FRONT PANEL ASSY (UR) [ALL EXCEPT J] (V-580) FILTER, REMO-CON [J] CHASSIS, MAIN [J]	
1-3	FELT, FOOT FILTER, DISPLAY LID ASSY, A (V-680) LID ASSY, B (V-580) WINDOW, DISPLAY [ALL EXCEPT J]	

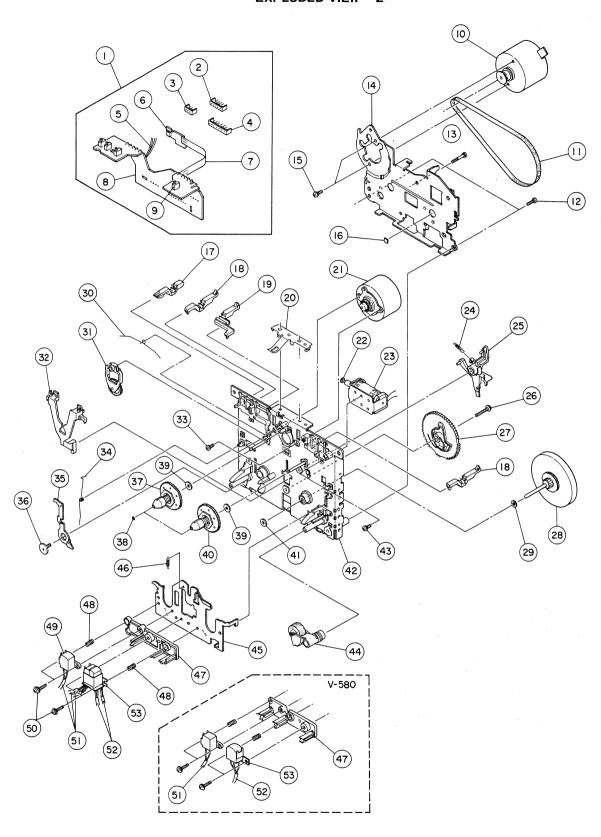
REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
1-36 1-37 1-38 1-39 1-40	5801126800 *5801127400 *5801287600 *5801287700 *5800954700	KNOB (2) COVER, BOTTOM WOOD, SIDE (L) [J] (V-680) WOOD, SIDE (R) [J] (V-680) SCREW ASSY (SIDE WOOD) [J] (V-680)	
1-41 1-42 1-43	*5801283800 *5200288100 *5800814900	REMO-CON. PCB ASSY [ALL EXCEPT J]	
-5   -52  -53  -54  -55	*5800758000 *5783543010 *5783604012 *5783603010 *5783072012	SCREW, BIND P-TITE M3XIO(BLK NI) SCREW, BIND P-TITE M4XI2	·
1-56 1-57 1-58 1-59 1-60	*5783003004 *5786713000 *5730017600 *5783542612 *5783603012	CLIP, HARNESS 3.0X9.1X50 SCREW, BIND BR-TITE M3X6 SCREW, BIND P-TITE M2.6X12 (BLK NI)	
1-61 1-62	*5780023006 *5730017700	SCREW, BIND M3X6 (BLK NI) SCREW, BIND BR-TITE M3X8	

#### INCLUDED ACCESORIES

EXPLODED VIEW-1

REF. NO.	PARTS NO.	DESCREPTION	REMARKS
	*5700115200	OWNER'S MANUAL [J] OWNER'S MANUAL [ALL EXCEPT J] OWNER'S MANUAL [C,E] CORD, IN-OUT  .OM	
	*5744076000 *5347003100	REMOTE CONTROL RC-348 BATTERIES SUM-3 [J]	`

#### EXPLODED VIEW - 2



EXPLODED VIEW-2

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
2-   2- 2 2- 3 2- 4 2- 5	*5761769400 *5761769600 *5761749300 *5761749100 *5761769700	CONNECTOR F067-110 B7B-EH UY15B-16 B3B-EH B5B-EH JUMPER, 2P WGI3K-10	
2- 6 2- 7 2- 8 2- 9 2-10	*5761748800 *5761748900 *5761769500 5761748700 5761747800	GP 2S09B JUMPER, 3P WG46V-06 BOARD FP17E-71 SWITCH, PUSH MOTOR, DC: W/PULLEY	
2-11 2-12 2-13 2-14 2-15	5761769200 *5761690900 *5761769300 *5761768900 *5761746400	BELT, MAIN FF15R-11 SCREW, WAVE 2.6X8 UG12H-14 SCREW, S-TITE M2.6X23.5 UG17H-11 F/W BKT FC47D-13 SCREW, PAN 2.6X3.5	
2-16 2-17 2-18 2-19 2-20	*5761747700 *5761749500 *5761749600 *5761749700 *5761750200	SPACER LEVER, PACK LEVER, RECORD LEVER, METAL SPRING, CASSETTE PRESS	
2-21 2-22 2-23 2-24 2-25	5761745800 5761745800 5761801900 *5761746300 5761746200 *5761768800 5761769000	MOTOR, DC: REEL (V-580) MOTOR, DC: REEL (V-680) MOTOR, DC: REEL (V-680) PIN, SOLENOID SOLENOID PKA16146 SPRING, PLAY ARM FK22G-14 ARM (F), PLAY FD38M-22	Ser. No. 61992 and before Ser. No. 61993 and after
2-26 2-27 2-28 2-29 2-30		SCREW, TAP TITE 2X15 UGI7L-II GEAR (F), CAM FD38P-I6 F/W ASSY WASHER, POLYSLIDER FJIII-30 SPRING, HOLD	
2-31 2-32 2-33 2-34 2-35	5761745300 *5761745700 *5761745900 *5761768600 *5761768500	IDLER ASSY LEVER(C), HOLD SCREW, BIND PAN 2.6X6ZN SPRING (L), EJECT FK22P-16 ARM (L), EJECT FC39S-33	
2-36 2-37 2-38 2-39 2-40	*5761746700 5761773700 5761686300 *5761745600 *5761745500 5761686400	WASHER, POLYSLIDER	
2-41 2-42 2-43 2-44 2-45	*5761689700 *5761768400 *5761769800 5761768300 *5761768100	WASHER, OIL SEAL FJI41-11 CHASSIS, MECHANISM FII2-110 SCREW, PAN 2.6X4 ZN FGII4-15 PINCH ROLLER ASSY FR20L-21 BASE, HEAD FC38N-D3	
2-46 2-47 2-48 2-49 2-50	*5761744800 *5761770400 *5761768100 *5761767500 5761767900 *5761767400	HEAD, ÉRASE FUI92-II	
2-51 2-52 2-53	*5761770300 *5761770300 *5761770100 *5761770100 5761770200	CONNECTOR, WIER WH51L-05 (V-580) CONNECTOR, WIRE WH51K-03 (V-680) CONNECTOR, WIRE WH51K-03 (V-580)	

Parts marked with \*require longer delivery time.

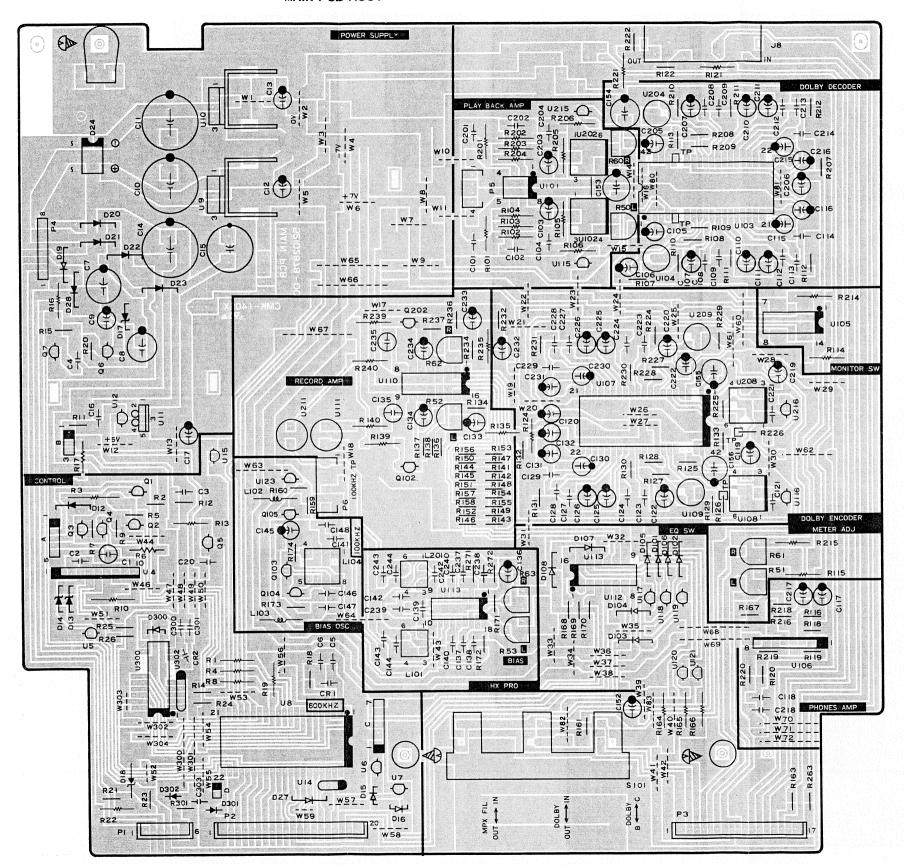
[J]:JAPAN [US]:U.S.A. [C]:CANADA [E]:EUROPE [UK]:U.K. [A]:AUSTRALIA [GE]:GENERAL EXPORT

# 8 PC BOARDS AND PARTS LIST

**基板図とパーツ・リスト** 

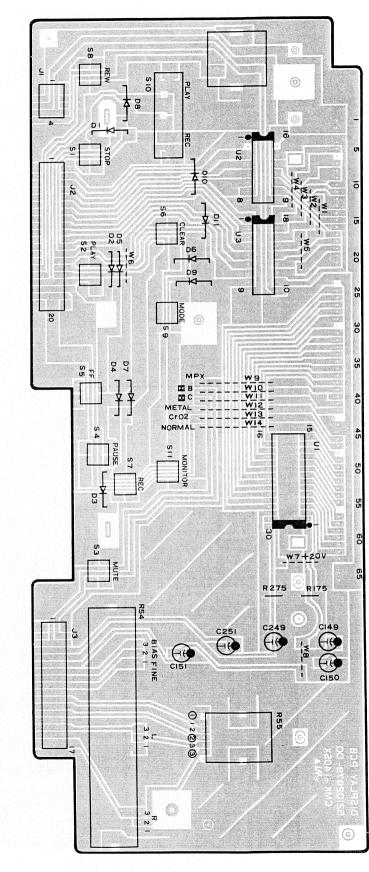
V-680

MAIN PCB ASSY



JACK PCB ASSY

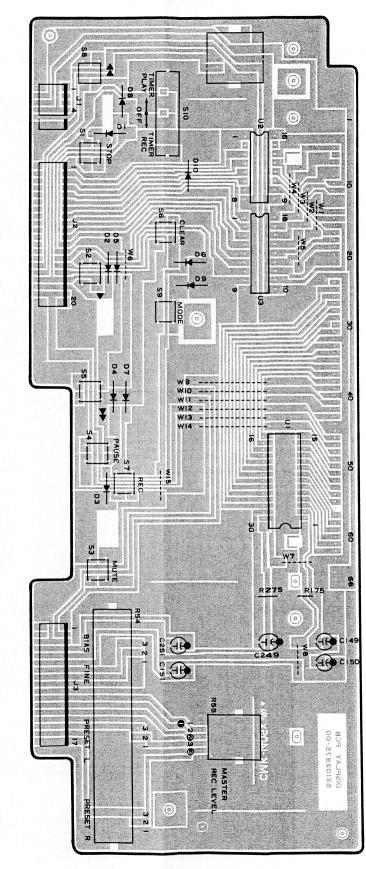




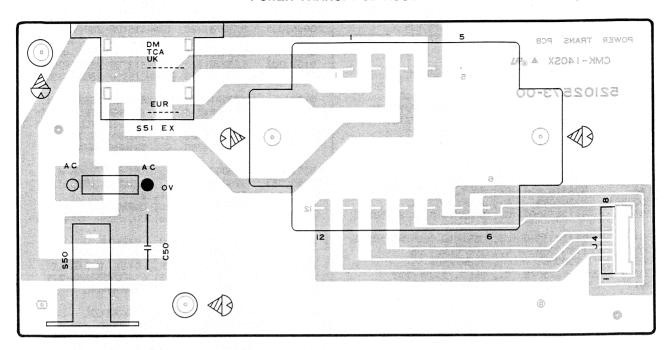
V-580 MAIN PCB ASSY R122 --S D24 700 R:4 R24 - RI52 DOLBY B W200 --- W201

**JACK PCB ASSY** 

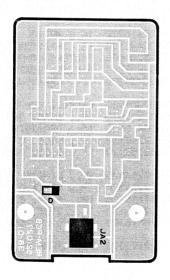
DISPLAY PCB ASSY



#### POWER TRANS. PCB ASSY



#### **REM PCB ASSY**



- PC boards shown viewed from parts side.
- プリント基板図は部品面が示されています。

#### MAIN PCB ASSY (V-680)

REF.NO.	PARTS NO.	DESCRIPTION
	*5200287810 *5210287800 5800990100	MAIN PCB ASSY [J] MAIN PCB ASSY [ALL EXCEPT J] MAIN PCB HEAT SINK PLATE (A), EARTH
C014 C015	12907112 ∆:5260308600 ∆:5260428110 ∆:5260425810 5263107220	C., 10000PF/16V 10% C., ELEC. 2200UF/16V M C., ELEC. 470UF/16V C., ELEC 470UF/16V M C., POLY. 560PF/100V J
C141 C143,243 C148 C300,301 C303	5172200000 5263105420 5263102520 12907088 5173435000	C., CERAMIC 10PF/50V T C., POLY. 100PF/100V J C., POLY. 0.0068UF/100V J C., 100PF/50V 5% C., CERAMIC 0.047UF/50V Z
C004 C005 C006 C007 CR01	5173435000 12907088 12907088 △ 5260425510 5347011200	C., CERAMIC 0.047UF/50V Z C., 100PF/50V 5% C., 100PF/50V 5% C., ELEC. 330UF/50V M OSC., CERAMIC 600KHZ
CRO2 D012 D013	5224017120 5224573001 (Ser. No. 6	OSC., CERAMIC DIODE, ISRI39-200 DIODE, ZENER RD4.7EL3 1992 and before) DIODE, ZENER RD7.5EL3 1993 and after)
DO14	(V-680 Ser. 522457280)	DIODE, ZENER RD3.OEL2 No. 61992 and before) DIODE, ZENER RD4.7EL1 1993 and after)
D017 D018 D019	5224015020 5224577901 5224574701 5224012920 ∆5224017120	DIODE, 182473
D027 D028 D101-108	△ 5228010700 5224012920 △ 5224017120 5224012920 5224015020	DIODE, ISRI39-200 DIODE, IS2473
J008 L101,201 L102 L103 L104	5330509600 5286025700 5286031000 5286031800 5286035900	JACK, PIN 4P COIL, STEP UP COIL, CHOKE 220UH LALO4KB COIL, CHOKE 1000UH LALO4NA COIL, OSC 100KHZ
P001 P001 P002 P003 P004	5336279400 5336279600 5336281000 5336280700 5334055100	CONN., PULG 4P IL-SDA-P CONN., PULG 6P IL-SDA-P CONN., PULG 20P IL-SDA-P CONN., PULG 17P IL-SDA-P CONN., PULG TYC-B08P-II
P005 P006 Q001 Q002 Q003	5336245400 5336245600 5231761300 5145133000 5231761300	TRANSISTOR 2SD734F TRANSISTOR 2SC-1645

#### MAIN PCB ASSY (V-680)

REF.NO.	PARTS NO.	DESCRIPTION
Q004,005 Q006 Q007 Q102,202 Q103,104	5230781120 Δ5231761300 5230781120 5230781120 5230781120	TRANSISTOR 2SC1740SLN TRANSISTOR 2SD734F TRANSISTOR 2SC1740SLN TRANSISTOR 2SC1740SLN TRANSISTOR 2SC1740SLN
R010 R050,060	5230019020 △ 5241284210 △ 5241274510 5280021100 5280021700	TRANSISTOR 2SA933SLN R., INCOMBUSTBLE 36 2W J R., INCOMBUSTBLE 47 IW J R., TRIMMER 4.7KB R., TRIMMER 47KB H.
R052,062 R053,063 R166 R301 S101	5280021500 5280021300 5181492000 5240031420 5300051800	
U004 U005 U006,007 U008 U009	5220411500 5232255720 5232254820 5220817600 <u>↑</u> 5220432200	IC., BA6109 TR., DIGI. DTC124ES TR., DIGI. DTA124ES LSI., UPD7537ACU-223 IC., M5F78MO7L
U010 U011 U012 U014 U015	△ 5220432900 △ 5220439800 5232255720 5242122800 5232254820	IC., M5F79MO7L IC., L78LR05-MA TR., DIGI. DTC124ES R., ARRAY RYLS-3J223 TR., DIGI. DTA124ES
U101 U102,202 U103 U104,204 U105	52204.40.100	IC., UPC457OC FILTER, LOWPASS 100KHZ IC., HA1208BANT FILTER, LOWPASS 19.8KHZ IC., DIGITAL BU4066B
U106 U107 U108,208 U109,209 U110	5220416200 5220440100 5292805600 5292805200 5220439700	FILTER, LOWPASS 19.8KHZ
U112 U113	5292805900 5232250900 5220430400 5232255720 5232255720	TR., ARRAY BA6251 IC., UPC1297CA,
U117,118 U119 U120,121 U123 U300	5232253020 5232254820 5232255720 5232255720 5220816700	TR., DIGITAL DTAI43ES TR., DIGI. DTAI24ES TR., DIGI. DTCI24ES TR., DIGI. DTCI24ES UCON., UPD7566CS-134
U302	5242123000	R., ARRAY RYLA-5J223

#### JACK PCB (A) ASSY (V-680)

REF.NO.	PARTS NO.	DESCRIPTION
		JACK PCB ASSY
J007	*5210288000 5330011600	JACK PCB JACK, 3P YKB21-5010

Parts marked with \*require longer delivery time.

[J]:JAPAN [US]:U.S.A. [C]:CANADA [E]:EUROPE [UK]:U.K. [A]:AUSTRALIA [GE]:GENERAL EXPORT

#### MAIN PCB ASSY (V-580)

#### DESCRIPTION REF NO. PARTS NO. MAIN PCB ASSY [J] \*5200287400 MAIN PCB ASSY [ALL EXCEPT J] \*5200287410 \*5210287400 MAIN PCB 5800990100 HEAT SINK JACK, PIN 4P 5330509600 PLATE (A), EARTH P.C.BORD C., ELEC. 2.2UF/50V M 5555590000 C001 5260295750 C., CERAMIC 0.01UF/50V T 5173433000 C002 C., CERAMIC 10000PF/16V 10% C003 12907112 C005,006 CERAMIC 100PF/50V 5% 12907088 C007 △ 5260425510 C., ELEC. 330UF/50V M AS C., ELEC. 2200UF/16V M PS C., ELEC. 4700UF/16V C., ELEC. 2200UF/16V M AS C010,011 A5260308600 △ 5260428110 C014 C015 △ 5260427010 C., CERAMIC 10000PF/16V 10% 12907112 C016 C., POLY. 910PF/100V J C101,201 5263107720 C., IOOPF/50V 5% C., CERAMIC 0.047UF 50V OSC., CERAMIC 600KHZ C300,301 12907088 C303 5173435000 CROI 5347011200 OSC., CERAMIC 5347006500 CR02 DIODE, ISRI39-200 DIODE, ZENER RD4.7EL3 D012 5224017120 D013 5224573001 D014 5224571801 DIODE, ZENER RD3.0FL2 DIODE, ISSI33T-77 DIODE, ZENER RD22EL2 D015,016 5224015020 D017 5224577901 DIODE, ZENER RD8.2EL2 5224574701 0018 DIODE, ISRI39-200 T-31 SILICON STACK, SIWB8(A)20 DIODE, ISRI39-200 T-31 DIODE, ISSI33T-77 D019-023 A 5224017120 D024 △5228010700 △5224017120 D028 D101-104 5224015020 DIODE, 192473 D105-108 5224012920 DIODE, ISSI33T-77 DIODE, ISSI33T-77 COIL, CHOKE 220UH LAL04KB COIL, CHOKE 1000UH LAL04NA D109 5224015020 D300-302 5224015020 LIOI 5286031000 L102 5286031800 COIL, STEP UP COIL, OSC 100KHZ L103,203 5286036100 5286035900 1.104 CONN., PULG 4P IL-SDA-P P001 5336279400 CONN., PULG 6P IL-SDA-P CONN., PULG 20P IL-SDA-P P001 5336279600 P002 5336281000 CONN., PULG 17P IL-SDA-P CONN., PULG BO6B-XH-A P003 5336280700 P004 5336245600 CONN., PULG BO3B-XH-A CONN., PULG TYC-BO8P-11 P0.05 5336245300 P006 5334055100 Q001 5231761300 TRANSISTOR, 2SD734F 0002 5145133000 TRANSISTOR, 2SC-1645 TRANSISTOR, 2SD734F TRANSISTOR, 2SC1740SLN **0003** 5231761300 5230781120 Q004,005 TRANSISTOR, 2SD734F TRANSISTOR, 2SC1740SLN 0006 △5231761300 Q007 5230781120 TRANSISTOR, 2SC1740SLN TRANSISTOR, 2SA933SLN Q101-104 5230781120 Q105 5230019020 TRANSISTOR, 2SC1740SLN R., INCOMBUSTBLE 36 2W J 2SC1740SLN Q201,202 5230781120 △ 524 | 2842 | 0 R003 R., UNCOMBUSTBLE 47 IW R010 △5241274510

#### MAIN PCB ASSY (V-580)

REF.NO.	PARTS NO.	DESCRIPTION
R051,061 R052,062 R053,063 R056,066 R301	5280021700	R., TRIMMER 47KB H. R., TRIMMER 22KB H. R., TRIMMER,47KB H. R., TRIMMER 10KB H. R., CARBON 22K
S012 U004 U005 U006,007 U008	5300051700 5220411500 5232255720 5232254820 5220817600	SWITCH, PUSH 2GANG 2-2N IC., BA6109 TR., DIGI. DTC124ES TR., DIGI. DTA124ES LSI., UCOM. UPD7537ACU-223
U011	△ 5220432200 △ 5220432900 △ 5220439800 5232255720 5232254820	IC., M5F78MO7L IC., M5F79MO7L IC., L78LRO5-MA TR., DIGI. DTC124ES TR., DIGI. DTA124ES
U015	5242122800 5232254820 5220439600 5292806800 5292805200	R., ARRAY RYLS-3J223 TR., DIGI. DTA124ES IC., UPC457OC FILTER, LOWPASS 19KHZ FILTER, LOWPASS 19.8KHZ
U104 U105,205 U106,206 U107,207 U108	5220440100 5232255720 5232255720 5292805900 5220439700	IC., HAI2088ANT-01 TR., DIGI. DTC124ES TR., DIGI. DTC124ES FILTER, LOW PASS 100KHZ IC., CXA1198AP
U109 U110,111 U112 U113-115 U116	5232250900 5232253020 5232254820 5232255720 5220430400	TR., ARRAY BA6251 TR., DIGITAL DTA143ES TR., DIGI. DTA124ES TR.,DIGI. DTC124ES IC., UPC1297CA
U117 U118 U119 U120 U300	5220416200 5232255720 5220439900 5232255720 5220816700	IC., M5218L TR., DIGI. DTC124ES IC., UPC1330HA TR., DIGI. DTC124ES IC., UCOM. UPD7566CS-134
U <b>3</b> 02	5242123000	R., ARRAY RYLA-5J223

#### JACK PCB ASSY (V-580)

REF.NO.	PARTS NO.	DESCRIPTION	
	*5210287600	JACK PCB ASSY (V-580) JACK PCB JACK, 3P YKB21-5010	

#### DISPLAY PCB ASSY (V-680)

REF.NO.	PARTS NO.	DESCRIPTION
	*5200287900 *5200287910	- · - · - · · · · · · · · · · · · · · ·
	*5210287900 5800809101 5292209500	DISPLAY PCB
D001-011	5260421620 5260421820 5260421020 5224012920 5347004000	C., ELEC. 4.7UF/50V M C., ELEC. 10UF/25V M C., ELEC. 0.68UF/50V M DIODE, 1S2473 FL DISPLAY, FIP60AW12Y
J002 J003	5336281400 5336281600 5336283000 5336282700 5240032220	CONN SOCKET ZOP 1L-SDA-S
R055	5283506800 5282414800 5302103200 5300916400 5302103200	VR., 100KAX2/5KB 3-BLOCK VR., 100KAX2 ISIUVR 14 SWITCH, TACT KHH10910 SWITCH, SLIDE 1-3 SSSU01 SWITCH, TACT KHH10910
U001 U002 U003	5232252800	IC., HAI2067NT TR., ARRAY LBI292 TR., ARRAY LBI290

#### DISPLAY PCB ASSY (V-580)

REF.NO.	PARTS NO.	DESCRIPTION
	*5200287500 *5200287510	DISPLAY PCB ASSY [J] DISPLAY PCB ASSY [ALL EXCEPT J]
	*5210287500 5800809101 5292209500	
C150 C151,251 D001-010	5260421620 5260421820 5260421020 5224012920 5347004000	C., EREC. 10UF/25V M C., ELEC. 0.68UF/50V M D10DE, 1S2473
J001 J002 J003	5336281400 5336281600 5336283000 5336282700 5283506800	CONN., SOCKET 6P IL-SDA-S CONN., SOCKET 20P IL-SDA-S CONN., SOCKET 17P IL-SDA-S
R175.275	5282414800 5240032220 5302103200 5300916400 5220041000	R., CARBON 47K J SWITCH, TACT KHH10910 SWITCH, SLIDE 1-3 SSSU01
U002 U003	5232252800 5232252900	TR., ARRAY LB1292 TR., ARRAY LB1290

#### POWER TRANS PCB ASSY

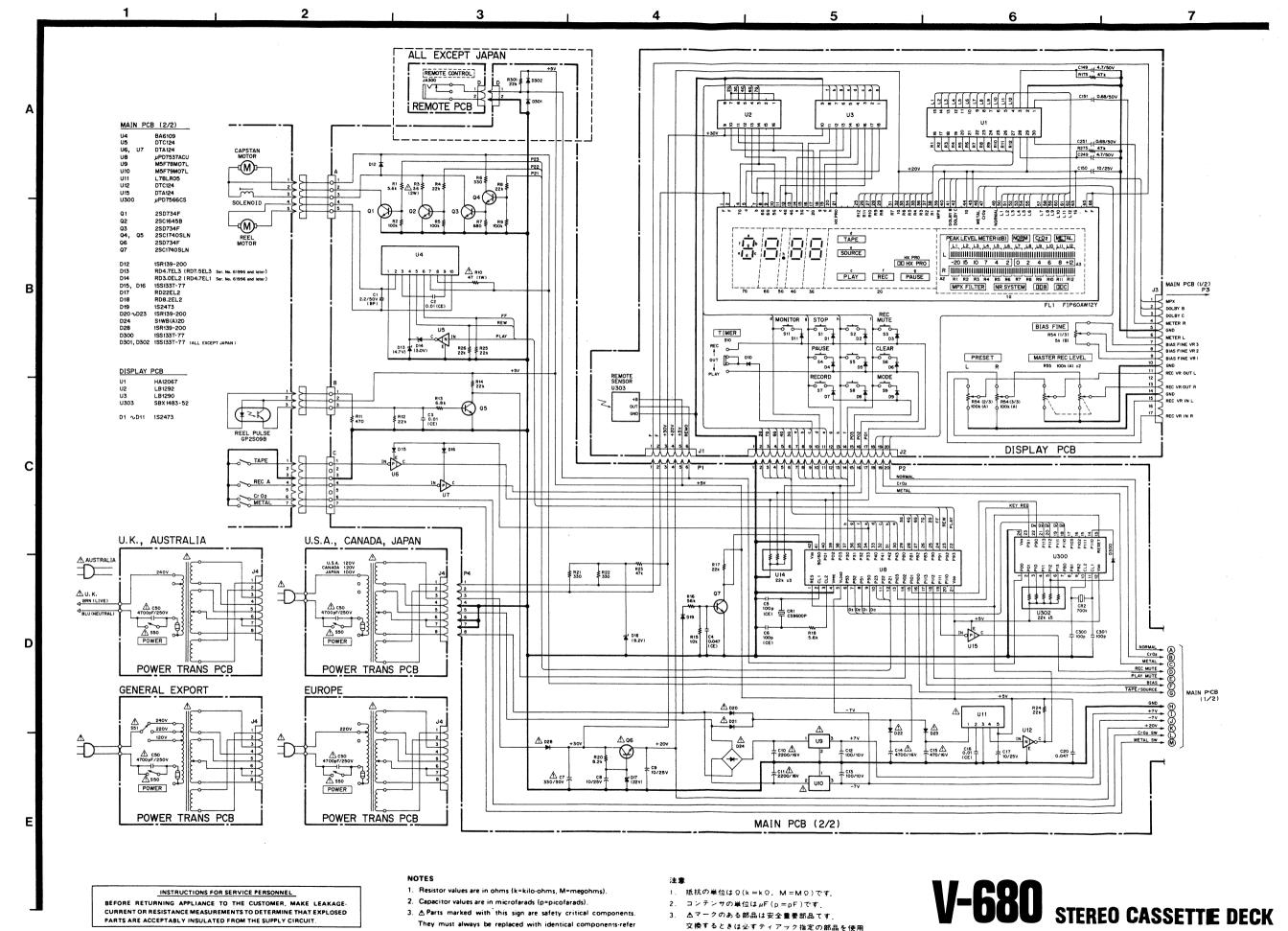
REF.NO.	PARTS NO.	DESCRIPTION
•	*5200257300	
	*5200257310	
	*5200257320	
	*5200257330	
	*5200257340	
	*5200257350	POWER TRANS PCB ASSY [A]
	*5210257300	POWER TRANS PCB
	5320050700	TRANSFORMER, POWER [J]
	5320050800	
	5320050900	TRANSFORMER, POWER [GE]
	5320051000	TRANSFORMER, POWER [E]
	5327007200	TERMINAL, 2P
	*5350015200	CORD, AC [J]
	*5350010800	CORD. AC UL SPT-I [US,C,GE]
	*5350011700	CORD. AC CEE CLASS-2 [E]
	*5128047000	CORD, AC [UK]
	*5350008300	CORD, AC ASS [A]
C050	5267704000	SPARK, KILLER 0.0047UF/250V
	5334049700	CONN., SOCKET 8P TYC-BX-A!
	5300051900	SWICH, PUSH I-I
	5332019900	SELECTOR, VOLTGE 1-3 FS908E [GE]

#### REMO-CON. PCB (A) ASSY

REF.NO.	PARTS NO.	DESCRIPTION
	*5210273801 5330015100	REMO-CON. PCB ASSY REMO-CON. PCB JACK, IP YKB21-5129 CONN., PULG 2P 8263-0212 WHT

As regards the resistors and capacitors, refer to the circuit diagrams contained in this manual.

標準の抵抗:コンデンサーは省略してあります。回路図 を参照してください。



to the appropriate parts list and ensure exact replacement.

1st Issue ; October 1989

INSTRUCTIONS FOR SERVICE PERSONNEL

BEFORE RETURNING APPLIANCE TO THE CUSTOMER, MAKE LEAKAGECURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPLOSED
PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT.

#### NOTES

- Resistor values are in ohms (k=kilo-ohms, M=megohms)
- 2. Capacitor values are in microfarads (p=picofarads).
- A Parts marked with this sign are safety critical components.
   They must always be replaced with identical components-refer to the appropriate parts list and ensure exact replacement.

#### 注意:

- I. 抵抗の単位はΩ(k=kΩ、M=MΩ)です。
- コンテンサの単位はμF(p=pF)です。
   Δマークのある部品は安全重要部品です。
- 3. Δマークのある部品は安全重要部品です。 交換するときは必ずティアック指定の部品を使用 してください。



